



Salinas City Elementary School District



“I insisted that all construction occur outside the school day and over summer break and ENGIE Services U.S. rose to this challenge, ordering and pre-positioning materials and equipment so they could literally mobilize and begin construction the afternoon that school recessed for the summer. No classroom was disrupted – even for one minute.”

Jerry Stratton, Assistant Superintendent of Business Services
Salinas City Elementary School District

THE OPPORTUNITY

Salinas City Elementary School District (SCESD), located on the Central California Coast, has 9,000 students and a mission to maximize the potential of all students to become caring and contributing members of a democratic, multicultural society. In the spirit of this mission, the District wanted to demonstrate its commitment to environmental stewardship and education with a far-reaching energy efficiency and solar program. In March 2013, construction began on an extensive program with ENGIE Services U.S. (ENGIE) to bring the benefits of solar energy and utility savings to the Salinas Valley community.

THE PARTNERSHIP

School District leaders contracted ENGIE to plan and implement this ambitious program, which encompasses solar power generation systems installed at 14 schools, and interior and exterior lighting retrofits at nine schools and the District Office and Corp Yard. To begin, ENGIE performed an initial energy assessment and identified the need for HVAC improvements, irrigation controls, a new energy management system, trash management, and roofing and window upgrades. District leaders were excited to incorporate a signature benefit of working with ENGIE

Program Highlights

- Expected to save the District nearly \$9MM in energy costs over the lifetime of the program
- Expected to reduce electric utility costs by 90% across 14 District sites
- Created more than 20 union construction jobs
- Avoids 871 metric tons of CO₂ emissions annually, the equivalent to the carbon sequestered annually by 714 acres of forest
- Integrated an energy education program into existing curriculum to enhance student engagement

Technical Scope

- Installed 1.44 MW solar photovoltaic (PV) systems across 14 schools
- Indoor and outdoor lighting upgrades at nine schools and two administrative offices



Technical Scope (continued)

- Installed LED lighting in two gymnasiums
- Upgraded irrigation controls to a weather and moisture detection-based system
- New energy management system
- Installed trash compactors to reduce number of trash pick ups
- HVAC improvements at Sherwood Elementary
- Installed a new roof at University Park Elementary

into the overall project: an energy education program created to help students receive hands-on, real-world learning using data from the solar power generation systems. As part of the program, ENGIE provided STEM-focused professional development sessions for over 40 teachers across the District to empower and prepare them to incorporate energy concepts and activities into the classroom. ENGIE also provided solar activity kits with accompanying standards-aligned curriculum to Kindergarten through 8th grade classrooms across the District, as well as a link to an online dashboard, accessing students and teachers to real-time data to use in classroom instruction at each school. These educational initiatives provided a platform that connected students' meaningful classroom work to the innovative technology surrounding them and ensured that students become immersed in the science behind solar energy, while honing in on problem-solving skills that can be used across multiple subjects.

To offset the cost of the program, ENGIE helped the District secure nearly \$700,000 in grants for solar installations and energy efficiency improvements. ENGIE arranged financing through a certificate of participation (COP) and administered a performance guarantee for five years, including operations and maintenance savings.

3 DIMENSIONS OF IMPACT

ENGIE is committed to building three dimensions of impact in every customer's future:



Supporting People



Saving Money



Protecting the Environment

The positive impact of this program was felt instantly, with the extensive lighting retrofits and solar power generation installation providing immediate savings on electricity costs. Through the implementation of a wide array of energy conservation measures, the program is expected to reduce CO₂ emissions equivalent to removing 187 cars from the road for a year and reduce electricity costs at 14 sites by 90 percent. The efficient lighting saves on maintenance and replacement costs and provide brighter learning environments. The program is expected to save the District almost \$9 million in energy costs over its life, over \$1.5 million in just its first five years of operation.

The educational component of this program was transformational for students and teachers. Gabriel Ramirez, Principal of Los Padres Elementary School commented, "It was wonderful to see the teachers' enthusiasm after ENGIE's training. Many are eager to use the program." Principal Ramirez was so inspired by the solar activities that he arranged for every teacher at his school to receive professional development to ensure the incorporation of the solar kits and online tools into classroom learning.

Principal Ramirez' sentiment exemplifies the passion and enthusiasm for this program felt throughout the District and beyond. Since this program took off, ENGIE has partnered with the City of Salinas and neighboring Hartnell College as a result of the successful partnership with SCESED.



On March 21st, 2014, ENGIE staff and District leaders held a ribbon-cutting event to dedicate the energy and sustainability program at the Boronda Meadows Elementary School.